

ABSTRACT

A disclosed substrate includes an electrically insulating circuit board, a pair of electrical lead pads adapted for mounting a light-emitting diode (LED) on a first surface, and a heat dissipating structure on the first surface. The heat dissipating structure includes an LED thermal pad adapted to abut the LED when mounted on the electrical lead pads, and a heat dissipation region extending from, and thermally coupled to, the LED thermal pad. The substrate also includes a thermally conductive plating on a second surface of the substrate opposite the heat dissipation region. A described lighting assembly includes the substrate, multiple LEDs connected to the electrical lead pads of the substrate, and multiple traces of the substrate connect the LEDs in a series circuit electrically isolated from the heat dissipating structures.